Egg quality characteristics of organic laying hens fed different levels of *Salvia officinalis*

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Summary

The aim was to investigate the effect of the herb Salvia offi cinalis (SO) on egg quality characteristics of laying hens reared organically. A total of 180 hens, were allocated in three groups: a control group (C), fed a basal ration, and two treatment groups SO5 and SO10 offered the same ration with SO included at levels of 0.5% and 1.0%, respectively. Each group was divided in two subgroups (n=30) that grazed in equal plots (120m2 each). Over 16 weeks, the following measurements were obtained: body weight of individual hens monthly, food consumption weekly, and egg production, daily. A sample of 12 eggs/subgroup was used to assess quality characteristics (shape index, shell deformation, shell thickness, Haugh units and weights of egg, shell, white and yolk). The results showed that yolk weight, shell weight, white pH and yolk pH, were signifi cantly ($P<0.05$ – $P<0.01$) affected by the incorporation of SO in the diet; the effects were proportional to the level of SO. With the exemption of shell width, there was a signifi cant interaction ($P<0.01$) between treatment and time for all the other characteristics. It was concluded that adding SO in the diet of organic laying hens improved the quality characteristics of produced eggs.